

FEB-28-2005 16:03

MAYES TESTING ENGINEERS

425 745 1737 P.01/07

# **MAYES TESTING ENGINEERS, INC.**

Everett Office  
917-134th Street SW  
Suite A-1  
Everett, WA 98204  
ph 425.742.9360  
fax 425.745.1737

## **Fax**

To: *John Jack* From: *Mike Mayes*  
Fax: *206-447-0299* Pages: *7*  
Phone: *206-898-8561* Date: *2-28-05*  
Re: *Rainier Commons* CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

*John,*

*As requested by your site superintendent,  
Bull, we are sending our proposal for this  
project.*

*This is identical to the proposal sent  
to Hentzel Hazen on November 4 except  
we have added load testing for installed  
dowells.*

*We are assuming that the scope of work  
hasn't significantly changed from the June 2004  
documents*

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MTE Form # 116, Rev 1, 11-01

RCLLC 0004414

**MAYES TESTING ENGINEERS, INC.**

November 4, 2004  
February 28, 2005-Revised

Mr. John Jack  
Ariel Development  
3100 Airport Way South  
Seattle, WA 98134

Re: Testing and Inspection Services  
Rainer Commons  
Mayes Testing Engineers Proposal No. 24384 (Revision One)

**Everett Office**  
917-134th Street SW  
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**Tacoma Office**  
10029 S. Tacoma Way  
Suite E-2  
Tacoma, WA 98499  
ph 253.584.3720  
fax 253.584.3707

**Portland Office**  
7911 NE 33rd Drive  
Suite 190  
Portland, OR 97211  
ph 503.281.7515  
fax 503.281.7579

Dear Mr. Jack,

We are pleased to provide you with our proposal for testing and inspection services for the above referenced project. This proposal is based on our review of the structural drawings dated June 16, 2004. Final costs may vary up or down depending on the contractor's scheduling of the work. All services will be billed at reduced rates in accordance with the attached January 1999 Fee Schedule and General Conditions. Please note these rates represent a 20% discount from our current rates.

We understand the scope of work to include testing and inspection of soil density, reinforced concrete, shotcrete, baseplate grout, epoxy grouted anchors, masonry, structural steel fabrication and erection, and roof diaphragm nailing. We have also added load testing for epoxy dowels. We assume structural steel fabrication will be at a local Puget Sound area shop.

Mayes Testing Engineers, Inc. is a full-service testing and inspection agency. We are fully certified and perform all tests in accordance with ASTM and UBC standards. We have the largest staff of WABO registered inspectors in the state to support your project. Washington State Professional Engineers directly supervise all inspection activities. As an integral part of the project team, we work with our clients to provide realistic testing and inspection budgets with **no hidden charges**. Our clients are not charged for sample pick-up, mileage or secretarial services. Our clients will only be invoiced for actual work performed including project management. A four-hour minimum charge per call applies to all inspections and time will be charged portal-to-portal from our Everett office. A premium rate of 1.5 times the regular rate will be charged for all work outside of normal working hours or in excess of 8 hours per day and on Saturdays, Sundays and Legal Holidays. Payment is net 30 days from date on invoice.

We trust that this provides you with the information you require. If you have any questions or if we may be of further assistance, please do not hesitate to call. If you find this proposal acceptable, please sign and return one copy to our office. We look forward to your favorable response.

Respectfully Submitted,  
**MAYES TESTING ENGINEERS, INC.**

  
Michael J. Mayes, P.E.  
President

Accepted By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Attachments: Cost Estimate  
January 1999 Fee Schedule and General Conditions

RCLLC 0004415

**Rainer Commons  
Testing and Inspection Services  
MTE Cost Estimate No. 24384 (Revision One)**

Item	Estimated No. of Units	Unit Price	Extended Total
<b>Inspections</b>			
Soil Density Testing ( <i>includes nuclear densometer</i> )	16 Hours	55.00 /hr	880.00
Estimate 4 inspections at 4 hours per inspection			
Reinforced Concrete Inspection	98 Hours	48.00 /hr	4,704.00
Foundations: Estimate 3 inspections at 4 hours per inspection			
Walls: Estimate 1 inspections at 6 hours per inspection			
Slabs on grade: Estimate 2 inspections at 4 hours per inspection			
Slabs on deck: Estimate 10 inspections at 6 hours per inspection			
Miscellaneous: Estimate 3 inspections at 4 hours per inspection			
Shotcrete Inspection	120 Hours	48.00 /hr	5,760.00
Estimate 15 inspections at 8 hours per inspection			
Baseplate Grout Inspection	8 Hours	48.00 /hr	384.00
Estimate 2 inspections at 4 hours per inspection			
Epoxy Grouted Anchor Inspection	80 Hours	48.00 /hr	3,840.00
Estimate 20 inspections at 4 hours per inspection			
Masonry Inspection ( <i>Periodic</i> )	60 Hours	48.00 /hr	2,880.00
Estimate 15 inspections at 4 hours per inspection			
Structural Steel Inspection	72 Hours	48.00 /hr	3,456.00
Fabrication Estimate 3 inspections at 4 hours per inspection			
Erection: Estimate 15 inspections at 4 hours per inspection			
Lateral Wood Frame Inspection	16 Hours	48.00 /hr	768.00
Diaphragm: Estimate 4 inspections at 4 hours per inspection			
Load Testing or Pull Testing	24 Hours	80.00 /hr	1,920.00
Estimate 6 inspections at 4 hours per inspection			
Project Management ( <i>Includes meetings, site visits, report review, mix design review, and misc. consultation</i> )	10 Hours	60.00 /hr	600.00

**MAYES TESTING ENGINEERS, INC.**

**RCLLC 0004416**

**Rainer Commons  
Testing and Inspection Services  
MTE Cost Estimate No. 24384 (Revision One)**

Item	Estimated No. of Units	Unit Price	Extended Total
<b>Laboratory Services</b>			
Soil Moisture Density Relationship Test ( <i>Proctor</i> )	1 Each	140.00 ea	140.00
Concrete Compressive Strength Cylinder Test	80 Each	16.00 ea	1,280.00
Masonry Grout Compressive Strength Test	45 Each	16.00 ea	720.00
Masonry Mortar Compressive Strength Test	45 Each	16.00 ea	720.00
Nonshrink Grout Compressive Strength Test	6 Each	16.00 ea	96.00
Shotcrete Panel Test ( <i>includes 3 cores</i> )	15 Each	120.00 ea	1,800.00
<b>Miscellaneous Services</b>			
Cylinder Pick-up			No Charge
Mileage			No Charge
Secretarial Services ( <i>Types reports, mail, postage, etc.</i> )			No Charge
Final Letter			No Charge
<b>Total Estimated Costs:</b>			<b>\$ 29,948.00</b>

A four-hour minimum charge per call applies to all inspections. A premium rate of 1.5 times the regular will be charged for all work outside of normal working hours in excess of 8 hours per day and on Saturdays, Sundays and Legal Holidays. Payment is net 30 days.

**MAYES TESTING ENGINEERS, INC.**

RCLLC 0004417

**MAYES TESTING ENGINEERS, INC.**  
**FEE SCHEDULE AND GENERAL CONDITIONS**  
Effective January 1, 1999

**Engineering Services**

Principal Engineer	98.00 /hour
Staff Engineer	80.00 /hour
Engineering Technician	65.00 /hour
Project Manager	60.00 /hour

**Special Testing Services**

Brick Shear Testing ( <i>two man crew</i> )	145.00 /hour
Condition Survey	80.00 /hour
Load Testing	80.00 /hour
Floor Flatness Testing	80.00 /hour
Pachometer Testing	80.00 /hour
Impact Echo Testing	80.00 /hour

**Inspection Services**

Concrete, Masonry, Post Tension, Batch Plant, Reinforcing Steel, Epoxy Anchors, Shotcrete, Waterproofing, Fireproofing, Roofing or Wood Framing Inspection	48.00 /hour
Structural Steel Inspection	48.00 /hour
Intumescent Paint Inspection	50.00 /hour
Soil Density Testing ( <i>include nuclear densometer</i> )	55.00 /hour
Asphalt Density Testing ( <i>include nuclear densometer</i> )	55.00 /hour
Asphalt Coring	65.00 /hour
Laboratory Technician	65.00 /hour
Senior Resident Inspector	55.00 /hour

**Non-Destructive Testing**

Ultrasonic Testing	55.00 /hour
Magnetic Particle or Dye Penetrant Testing	50.00 /hour
NDE Level III Consultation	98.00 /hour

**Concrete and Aggregate Testing**

Concrete Compressive Strength Cylinder Test ( <i>includes curing, breaking and report</i> )	16.00 each
Sieve Analysis Test ( <i>dry only</i> )	80.00 each
Sieve Analysis Test ( <i>includes particles finer than #200</i> )	135.00 each
Organic Impurities Test	40.00 each
Specific Gravities Course Aggregate Test	35.00 each
Specific Gravities Fine Aggregate Test	60.00 each
Unit Weight Test	40.00 each
Mix Design: 1 Point Verification	200.00 each
3 Point Water Cement Curve	600.00 each
Concrete Core Test ( <i>includes coring, trimming and testing</i> )	50.00 each
Trimming Cores	12.00 /end
Concrete Flexural Strength Beam Test	40.00 each
Lightweight Pieces in Aggregate Test	80.00 each
Clay Lumps and Friable Particles Test	80.00 each
Concrete Shrinkage Test ( <i>ASTM C157 - set of 3</i> )	260.00 each
Modulus of Elasticity Test	90.00 each
Splitting Tensile Test	65.00 each
Air Dry Unit Weight Test	35.00 each
Degradation Test	125.00 each
LA Abrasion Test	110.00 each
Sodium Sulfate Soundness Test	130.00 each
Shotcrete Panel Test	120.00 each
Ethylene Glycol Test	125.00 each
Moisture Emission Test Kits	25.00 each

**MAYES TESTING ENGINEERS, INC.**

**Masonry Testing**

Masonry Drying Shrinkage Test ( <i>set of 3</i> )	275.00 each
Masonry Absorption, Unit Wt. And Moisture Content Test	30.00 each
Masonry Prism Test ( <i>grouted or ungrouted</i> )	100.00 each
Masonry Compression Test	50.00 each
Masonry Grout Compressive Stength Test	16.00 each
Masonry Mortar Compressive Stength Test	16.00 each
Masonry Efflorescence Test ( <i>set of 5</i> )	75.00 each
Brick Compression Test	30.00 each
Brick Efflorescence Test ( <i>set of 5</i> )	75.00 each
Brick Absorption Test ( <i>24 hour soak</i> )	30.00 each
Brick Absorption Test ( <i>5 hour boil</i> )	55.00 each
Retaining Wall Unit Compression Test	75.00 each

**Soils Testing**

Soil Moisture Density Relationship Test ( <i>proctor</i> )	140.00 each
Atterberg Limits Tests	90.00 each
Liquid Limit Only Test	50.00 each
Plastic Limit Only Test	40.00 each
Sand Equivalent Test	75.00 each
Soil Hydrometer Analysis	180.00 each
Soil Specific Gravity Test	50.00 each
Soil Moisture Content Test ( <i>natural</i> )	25.00 each
California Bearing Ratio Test ( <i>CBR - with proctor</i> )	525.00 each
R-Value Test	275.00 each
Soil Relative Density Test	200.00 each
Organic Matter Analysis ( <i>loss on ignition by weight</i> )	55.00 each

**Physical Testing**

#3 - #9 Reinforcing Steel Tensile Test	40.00 each
#10 - #11 Reinforcing Steel Tensile Test	55.00 each
Reduced Section Tensile Coupons Test	30.00 each
Machining Tensile Test	Cost + 15%
Stressing Strand Tensile Test ( <i>breaking strength only</i> )	50.00 each
Macroetch Test ( <i>evaluation only</i> )	30.00 each
Macroetch Test ( <i>sample preparation</i> )	30.00 each
Fireproofing Density Test	60.00 each

**Asphalt Testing**

Asphalt Mix Design Test	1900.00 each
Asphalt Marshall Set Test ( <i>flow, stability, voids</i> )	300.00 each
Asphalt Extraction & Gradation Test	180.00 each
Asphalt Stripping Test	25.00 each
Asphalt Fractured Face Count Test	55.00 each
Asphalt Core Bit Charge	3.00 /inch
Asphalt Core Density Test	30.00 each
Asphalt Rice Density Test	80.00 each

**Travel**

Mileage ( <i>charged only outside our regular service area</i> )	0.40 /mile
Subsistence ( <i>lower 49 states</i> )	85.00 /day
Reimbursable Expenses ( <i>commercial travel, rentals, consumables, etc.</i> )	Cost + 15%
Subconsultants	Cost + 15%

**MAYES TESTING ENGINEERS, INC.**

RCLLC 0004419

**GENERAL CONDITIONS**

- 1.) For Mayes Testing Engineers, Inc. (MTE) inspections, a four-hour minimum charge per call applies to all inspections and time will be charged portal-to-portal from our local branch office. A premium rate of 1.5 times the regular rate will be charged for all work in excess of 8 hours per day and on Saturdays, Sundays and Legal Holidays.
- 2.) The client understands that no final letter of compliance will be issued to the building department for the project until all outstanding invoices have been paid.
- 3.) Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of work ordered by Client is adequate and sufficient for Client's intended purpose. Client shall communicate these General Conditions to each and every third party to whom Client transmits any part of MTE's work. MTE shall have no duty or obligation to any third party greater than that set forth in MTE's proposal, Client's acceptance thereof and these General Conditions. The ordering of work from MTE shall constitute acceptance of the terms of MTE's proposal and these General Conditions.
- 4.) Client shall cause all tests and inspections of the site, materials and work performed by MTE or others to be timely and properly performed in accordance with the plans, specifications and contract documents, and MTE's recommendations. No claims for loss, damage or injury shall be brought against MTE by Client or any third party unless all tests and inspections have been so performed and unless MTE's recommendations have been followed. Client agrees to indemnify, defend and hold MTE, its officers, employees and agents harmless from any and all claims, suits, losses, costs and expenses, including, but not limited to, court costs and reasonable attorney's fees in the event that all such tests and inspections are not so performed, or MTE's recommendations are not so followed except to the extent that such failure is the result of the negligence, willful or wanton act or omission of MTE, its officers, agents or employees.
- 5.) MTE's work shall not include determining, supervising or implementing the means, methods, techniques, sequences or procedures of construction. MTE shall not be responsible for evaluating, reporting or affecting job conditions concerning health, safety or welfare. MTE's work or failure to perform same shall not in any way excuse any contractor, subcontractor or supplier from performance of its work in accordance with the contract documents.
- 6.) Unless otherwise agreed, test specimens or samples will be disposed of immediately upon completion of the test.
- 7.) Invoices are due and payable upon receipt. Invoices not paid within 30 days of the date rendered will be assessed a finance charge of one and a half percent per month, or fraction thereof, for each month beyond 30 days past due. Invoices not paid within 60 days may result in MTE stopping work until such invoices rendered are paid in full. Client will be responsible for all expenses incurred in the collection of any unpaid balance, including collection agency fees, attorney's fees, and other legal fees.
- 8.) The extension of unit prices herein with quantities to establish a total estimated cost does not guarantee a maximum cost to complete the inspection and/or testing for a construction project. The quantities when given are estimates based on contract documents and schedules made available at the time of proposal preparation. Since schedule, performance, production and charges are directed and/or controlled by others, any quantity extensions must be considered as estimated and not a guarantee of maximum cost. The term "Cost Estimate" does not imply a maximum contract amount, but only the extension value of our unit prices at the time of proposal preparation.
- 9.) MTE is covered by General Liability Insurance for bodily injury and property damage arising directly from our negligent acts or omissions, with a combined limit of \$2,000,000 dollars aggregate. If Client requires additional coverage in excess of this amount, and if procurable, MTE will take out additional General Liability Insurance to the limits Client requires at client's expense.
- 10.) MTE will provide its professional services to Client, as defined by its scope of work with that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. This representation is in lieu of any warranties or other representations, either expressed or implied. It is also understood and agreed that statements made in MTE reports are opinions based on engineering judgement, and should not be construed to be conclusive representations of fact. If conditions differ from those indicated in the reports come to Client's attention after receipt of the reports, it is recommended that Client contact MTE immediately to authorize further appropriate evaluation. MTE agrees to hold harmless and to indemnify Client on account of any damages due to bodily injury or property damage, or breach of contract, arising directly out of a negligent act or omission in the performance of professional services by MTE; provided, however, that any such liability, or liability to any third party arising out of MTE's performance of professional services, shall not exceed Fifty Thousand Dollars (\$50,000.00), or the total amount of the fee paid to MTE for its work performed pursuant to this agreement, whichever amount is greater. In the event Client is unable to accept this limitation, a surcharge of five percent (5%) of the total monthly invoice for services performed by MTE will be added to MTE's invoice to Client.
- 11.) Except to the extent specifically addressed in Paragraph 10, Client agrees to indemnify, defend and hold MTE, its officers, employees, agents and independent contractors harmless from any and all claims, suits, losses, costs and expenses, including but not limited to, court costs and reasonable attorneys fees arising or alleging to have arisen out of the performance of MTE's work. In the event that Client or Client's principal shall bring any suit, cause of action, claim or counterclaim against MTE to the extent that MTE shall prevail in such suit, cause of action, claim or counterclaim, the party initiating such action shall pay to MTE the costs and expenses incurred by MTE to answer and/or defend such suit, cause of action, claim or counterclaim, including reasonable attorneys fees, court costs, witness fees and other related expenses.

**MAYES TESTING ENGINEERS, INC.**

TOTAL P.07

**RCLLC 0004420**